

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** HADALAN VS-E 12E, Komp. A
- **Article number:** 50280 C
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation** Solvent-free, 2-component elastic epoxy resin coating
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Heinrich Hahne GmbH & Co. KG  
Heinrich-Hahne-Weg 11  
45711 Datteln Tel.: 02363/5663-0
- **Further information obtainable from:**  
Abteilung: Produktsicherheit  
Tel.: 02363 5663-0  
EMail: info@hahne-bautenschutz.de
- **Emergency telephone number:**  
Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,  
Tel.: 0551-19240

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2      H315 Causes skin irritation.  
Eye Irrit. 2      H319 Causes serious eye irritation.  
Skin Sens. 1      H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

- **Hazard description:**

Xi Irritant  
N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**

R 36/38 Irritating to eyes and skin.  
R 43 May cause sensitisation by skin contact.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Contains epoxy constituents. May produce an allergic reaction.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.  
GISCODE: RE 1 (resin + hardener)

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· **Code letter and hazard designation of product:**



*Xi Irritant*  
*N Dangerous for the environment*

· **Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)  
Bisphenol-F Epichlorhydrinharz Reaktionspr. Phenol-Formaldehyd Novolak mit Epichlorhydrin oxirane, mono[(C12-14-alkyloxy)methyl] derivs

· **Risk phrases:**

36/38 Irritating to eyes and skin.  
43 May cause sensitisation by skin contact.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

24/25 Avoid contact with skin and eyes.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
27 Take off immediately all contaminated clothing.  
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· **Special labelling of certain preparations:** Contains epoxy constituents. May produce an allergic reaction.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.  
· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions

· **Dangerous components:**

CAS: 25068-38-6 NLP: 500-033-5	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi R36/38; Xi R43; N R51/53 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%
CAS: 28064-14-4	Bisphenol-F Epichlorhydrinharz Reaktionspr. Phenol-Formaldehyd Novolak mit Epichlorhydrin Xi R36/38; Xi R43; N R51/53 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	10-25%
CAS: 68609-97-2 EINECS: 271-846-8	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Xi R38; Xi R43 Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%

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· **Additional information:** For the wording of the listed risk phrases refer to section 16.

#### 4 First aid measures

- **Description of first aid measures**
- **General information:** Remove contaminated clothing immediately.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

#### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire extinguishing methods suitable to surrounding conditions.  
Foam (alcohol resistant), carbon dioxide, powder, spray
- **For safety reasons unsuitable extinguishing agents:** Water jet.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** In case of fire: Use breathing apparatus with independent air supply.

#### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Keep people away, provide adequate ventilation.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

#### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Store in tightly closed containers in a cool, dry place.
- **Information about fire - and explosion protection:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Containers: Store in a cool, well-ventilated place.
- **Information about storage in one common storage facility:** Store away from foodstuffs, beverages and feed.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** VCI: 10
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** If good ventilation is not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  
Nitrile gloves with a thickness of > 0,4 mm wear (breakthrough time 480 min<sup>3</sup>-see also [www.gisbau.de](http://www.gisbau.de))
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed goggles
- **Body protection:** Protective work clothing.

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Colour:	according to product specification
Odour:	Characteristic
- **pH-value:** n.a.
- **Change in condition**

Melting point/Melting range:	Undetermined.
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<b>Boiling point/Boiling range:</b>	> 200 °C
· <b>Flash point:</b>	120 °C
· <b>Ignition temperature:</b>	450 °C
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Density at 20 °C:</b>	1.6 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Viscosity:</b>	
<b>Dynamic at 20 °C:</b>	9500 mPas
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**  
Exothermic reactions with amines. Processed quickly after adding the hardener, since in the high curing temperatures can be achieved.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**  
From highly acidic or alkaline materials as well as oxidizers away to avoid exothermic reactions.
- **Hazardous decomposition products:**  
At high temperatures, carbon monoxide and dioxide, smoke and oxides of nitrogen.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  - **European waste catalogue**
- |           |   |
|-----------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other dangerous substances |
|-----------|---|
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |  |   |
|--|---|
| · <b>UN-Number</b>   |   |
| · <b>ADR, IMDG, IATA</b>   | 3082  |
| · <b>UN proper shipping name</b>   |   |
| · <b>IMDG, IATA</b>  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.       |
| · <b>Transport hazard class(es)</b>  |   |
| · <b>ADR</b>   |   |
| · <b>Class</b>   | 9 Miscellaneous dangerous substances and articles.        |
| · <b>Label</b>   | 9   |
| · <b>IMDG, IATA</b>  |   |
| · <b>Class</b>   | 9 Miscellaneous dangerous substances and articles.        |
| · <b>Packing group</b>   |   |
| · <b>ADR</b>   | III   |
| · <b>Environmental hazards:</b>  |   |
| · <b>Marine pollutant:</b>   | No  |
| · <b>Special precautions for user</b>  | Warning: Miscellaneous dangerous substances and articles. |
| · <b>Danger code (Kemler):</b>   | 90  |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.   |
| · <b>Transport/Additional information:</b>                                       |   |
| · <b>ADR</b>   |   |
| · <b>Limited quantities (LQ)</b>   | LQ7   |

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· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	E

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **Other regulations, limitations and prohibitive regulations**  
For activities involving exposure to uncured epoxy resins and contact via the skin or the respiratory tract regular preventive medical examinations are to be taken.
- **VOC (EU)**  
This product is subject to Directive 2004/42/EC.  
EU limit value for this product is used in the manufacture condition: Cat A / j max. 500 g / l (2010). The product contains used in the finished state: max. 150 g / l VOC.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.
- **R-phrases**  
R36/38 Irritating to eyes and skin.  
R38 Irritating to skin.  
R43 May cause sensitisation by skin contact.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Abbreviations and acronyms:**  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals